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EXAMINER

MOORE, JAMES K

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 05/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/938,290

Applicant(s)

KOSKELAINEN, PETRI

Examiner

James K Moore

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21 and 23-35 is/are rejected.
- 7) ☒ Claim(s) 20, 22 and 36 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7, 9, 14, 24, and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 and 24 recite the limitations "said new terminal" and "said previous mobile terminal". There is insufficient antecedent basis for these limitations in the claims.

Claim 9 is indefinite because it is unclear whether the "said service information" in claim 9 refers to the "service information concerning the user" in line 3 of claim 1, or the "service information for the user to be used by the user terminal" in line 8 of claim 1.

Claims 14 and 31 recite the limitation "the ongoing subscriptions". There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7 and 32-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasuta (U.S. Patent No. 5,313,653).

Regarding claim 1, Sasuta discloses a method comprising storing service information concerning a user in a registrar (communication resource allocator system service database), and sending a subscription message from a user terminal (102-105) to the registrar. It is inherent that a header in the subscription message contains a unique identification (the user terminal ID) because the communication resource allocator must know the ID of the user terminal in order to respond to it. The method also comprises, in response to the subscription message, returning a notification message to the user terminal. The payload of the notification message includes service information for the user to be used by the user terminal for communication services. See Figure 1 and col. 3, line 9 through col. 4, line 26.

Regarding claim 2, Sasuta discloses all of the limitations of claim 1, and also discloses that the user has a plurality of ongoing communication services at the time that the subscription message is sent. See col. 2, line 58 through col. 3, line 8.

Regarding claim 3, Sasuta discloses all of the limitations of claim 2, and also discloses that the payload of the notification message may include information for each one of the ongoing communication services. See col. 4, lines 1-26.

Regarding claim 4, Sasuta discloses all of the limitations of claim 1. Sasuta also anticipates that the subscription message may be sent after the user terminal experiences a failure.

Regarding claim 5, Sasuta discloses all of the limitations of claim 4, and also discloses that the service information included in the payload of the notification message enables recovery of communication services to their state at the time of the terminal failure. For example, if the terminal loses a connection while it is involved with a facsimile transmission, it may recover to the facsimile transmission state by retransmitting a system service request. See col. 1, lines 31-54 and col. 3, lines 9-49.

Regarding claim 6, Sasuta discloses all of the limitations of claim 1. Furthermore, the subscription message may be sent by a new terminal after the user switches terminal from a previous terminal to the new terminal.

Regarding claim 7, Sasuta discloses all of the limitations of claim 1, and a new terminal may be a different type of mobile terminal than a previous mobile terminal.

Regarding claim 32, Sasuta discloses a mobile terminal that receives a plurality of communication services, and sends a subscription message to a registrar (communication resource allocator system service database). It is inherent that a header in the subscription message contains a unique identification. The mobile terminal also receives a notification message sent from the registrar in response to the subscription message. The payload of the notification message includes service information for the communication services. The mobile terminal also uses the service

information to continue the communication services. See Figure 1 and col. 3, line 9 through col. 4, line 26.

Regarding claim 33, Sasuta discloses all of the limitations of claim 32. Additionally, the subscription message may be sent after the mobile terminal experiences a failure.

Regarding claim 34, Sasuta discloses all of the limitations of claim 33, and also discloses that the service information included in the payload of the notification message enables recovery of communication services to their state at the time of the terminal failure. For example, if the terminal loses a connection while it is involved with a facsimile transmission, it may recover to the facsimile transmission state by retransmitting a system service request. See col. 1, lines 31-54 and col. 3, lines 9-49.

Regarding claim 35, Sasuta discloses all of the limitations of claim 34. Furthermore, the subscription message may be sent by the mobile terminal after the user switches to the mobile terminal from a previous mobile terminal.

5. Claims 1, 8, 9, 18, 19, 21, and 23-31 are rejected under 35 U.S.C. 102(a) as being anticipated by Rosenberg ("SIP and Instant Messaging").

Regarding claim 1, Rosenberg discloses a method comprising storing service information (presence data) concerning the user in a registrar, and sending a subscription message (SUBSCRIBE) from a user terminal to the registrar. A header in the subscription message inherently contains a unique indication identifying the user terminal. The method also comprises, in response to the subscription message,

returning a notification message (NOTIFY) to the user terminal. The payload of the notification message includes service information (presence data) for the user to be used by the user terminal for communication services (instant messaging).

Regarding claim 8, Rosenberg discloses all of the limitations of claim 1, and also discloses that the communication services include a push service and that the registrar is a push proxy.

Regarding claim 9, Rosenberg discloses all of the limitations of claim 8, and it is inherent that the push proxy is storing the service information when the user terminal subscribes to the communication services.

Regarding claim 18, Rosenberg discloses all of the limitations of claim 1, and also discloses that the registrar comprises a SIP registrar, the subscription message comprises a SIP SUBSCRIBE message, the header comprises an event header, and the notification message comprises a SIP NOTIFY response.

Regarding claim 19, Rosenberg discloses all of the limitations of claim 18, and it is inherent that the user may have a plurality of ongoing communication services at the time that the SIP SUBSCRIBE message is sent.

Regarding claim 21, Rosenberg discloses all of the limitations of claim 18. In addition, the SIP SUBSCRIBE message may be sent after the user terminal experiences a failure.

Regarding claim 23, Rosenberg discloses all of the limitations of claim 18. In addition, the SIP SUBSCRIBE message may be sent by a new terminal after the user switches terminals from a previous terminal to the new terminal.

Regarding claim 24, Rosenberg discloses all of the limitations of claim 18. In addition, a new terminal may be a different type of mobile terminal than a previous mobile terminal.

Regarding claim 25, Rosenberg discloses all of the limitations of claim 18, and also discloses that the communication services include a push service and that the SIP registrar is a push proxy.

Regarding claim 26, Rosenberg discloses all of the limitations of claim 25, and it is inherent that the push proxy is storing the service information when the user terminal subscribes to the communication services.

Regarding claim 27, Rosenberg discloses a proxy server which provides a plurality of communication services (instant messaging services) to a plurality of user terminals upon subscription of the user terminals to the communication services, stores and maintains service information (presence information) related to the communication services, and provides the service information in a single message (NOTIFY) sent in response to a request (SUBSCRIBE) from a user terminal.

Regarding claim 28, Rosenberg discloses all of the limitations of claim 27, and also discloses that the proxy server provides the service information in the payload of a notification message (NOTIFY) to the requesting user terminal.

Regarding claim 29, Rosenberg discloses all of the limitations of claim 28, and also discloses that the proxy server sends and receives messages according to SIP and that the notification message comprises a SIP NOTIFY response.

Regarding claim 30, Rosenberg discloses all of the limitations of claim 29, and also discloses that the request comprises a SIP SUBSCRIBE message.

Regarding claim 31, Rosenberg discloses all of the limitations of claim 28. Furthermore, Rosenberg anticipates a scenario where a user, who has had a previous subscription and has cancelled the subscription, may re-subscribe to the subscription when the proxy server receives the request from a user terminal, where the subscription is an ongoing user presence subscription subscribed to by other users.

6. Claims 10-17 are rejected under 35 U.S.C. 102(a) as being anticipated by Donovan ("IMPS – Instant Messaging and Presence Using SIP").

Regarding claim 10, Donovan discloses a network architecture comprising a plurality of terminals and an inherent radio access network. The radio access network inherently contains elements providing information indicating the presence of the terminals. The network architecture also comprises a presence server. The presence server receives the information indicating the presence of the terminals. The network architecture also comprises an inherent communication service provider which provides a plurality of communication services, and a proxy server. The proxy server provides the communication services (instant messaging services) to the user terminals upon subscription thereto, stores and maintains service information (presence information) related to the communication services, and provides the service information in a single message (NOTIFY) sent in response to a request (SUBSCRIBE) from a user terminal.

Regarding claim 11, Donovan discloses all of the limitations of claim 10, and also discloses that the proxy server provides the service information in the payload of a notification message (NOTIFY) sent to the requesting terminal in response to the request.

Regarding claim 12, Donovan discloses all of the limitations of claim 11, and also discloses that the presence server, the proxy server, and the user terminal send message to each other according to SIP and that the notification message comprises a SIP NOTIFY response.

Regarding claim 13, Donovan discloses all of the limitations of claim 12, and also discloses that the request comprises a SIP SUBSCRIBE message.

Regarding claim 14, Donovan discloses all of the limitations of claim 11. Furthermore, Donovan anticipates a scenario where a user, who has had a previous subscription and has cancelled the subscription, may re-subscribe to the subscription when the proxy server receives the request from a user terminal, where the subscription is an ongoing user presence subscription subscribed to by other users.

Regarding claim 15, Donovan discloses all of the limitations of claim 11. Furthermore, the user terminal may send the request after it experiences failure.

Regarding claim 16, Donovan discloses all of the limitations of claim 11. In addition, when a user switches to a new user terminal from a previous user terminal, the new user terminal may send the request to the proxy server.

Regarding claim 17, Donovan discloses all of the limitations of claim 16, and a new terminal may be a different type of user terminal than a previous user terminal.

Allowable Subject Matter

7. Claims 20, 22, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

The present invention is directed to a method of mobility and service recovery for a user in a wireless communication network. The method comprises storing service information concerning the user in a registrar, sending a subscription message from a user terminal to the registrar, and in response to the subscription message, returning a notification message to the user terminal. The payload of the notification message includes service information for the user to be used by the user terminal for communication services. The subscription message comprises a SIP SUBSCRIBE message, and the notification message comprises a SIP NOTIFY response. The user has a plurality of ongoing communication services at the time that the SIP SUBSCRIBE message is sent. The SIP SUBSCRIBE message is sent after the user terminal experiences a failure.

Claim 20 identifies the uniquely distinct feature "wherein the payload of said SIP NOTIFY response includes service information for each one of said ongoing communication services."

Claim 22 identifies the uniquely distinct feature "wherein said service information included in the payload of said SIP NOTIFY response enables recovery of communication services to their state at the time of said terminal failure."

The closest prior art, Rosenberg, discloses a method of mobility for a user in a wireless communication network. The method comprises storing service information concerning the user in a registrar, sending a subscription message from a user terminal to the registrar, and in response to the subscription message, returning a notification message to the user terminal. The payload of the notification message includes service information for the user to be used by the user terminal for communication services. The subscription message comprises a SIP SUBSCRIBE message, and the notification message comprises a SIP NOTIFY response. The user may have a plurality of ongoing communication services at the time that the SIP SUBSCRIBE message is sent. The SIP SUBSCRIBE message may be sent after the user terminal experiences a failure. However, Rosenberg fails to anticipate or render the above underlined limitations obvious.

The present invention is also directed to a mobile terminal. The mobile terminal receives a plurality of communication services and sends a subscription message to a registrar. A header in the subscription message contains a unique identification. The mobile terminal also receives a notification message sent from the registrar in response to the subscription message. The payload of the notification message includes service information for the communication services. The mobile terminal uses the service

information included in the payload of the notification message to continue the communication services.

Claim 36 identifies the uniquely distinct feature "wherein said subscription message is a SIP SUBSCRIBE message, said header is an event header in the SIP SUBSCRIBE message, and said notification message is a SIP NOTIFY response."

The closest prior art, Sasuta, discloses a mobile terminal. The mobile terminal receives a plurality of communication services and sends a subscription message to a registrar. A header in the subscription message contains a unique identification. The mobile terminal also receives a notification message sent from the registrar in response to the subscription message. The payload of the notification message includes service information for the communication services. The mobile terminal uses the service information included in the payload of the notification message to continue the communication services. However, Sasuta fails to anticipate or render the above underlined limitations obvious.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken Moore, whose telephone number is (703) 308-6042. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost, can be reached at (703) 305-4778.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ken Moore

4/25/03

JKM


ERIKA GARY
PATENT EXAMINER